

PolyArmor® 1010-PW

FAST CURE SPRAYABLE COATING / LINING

Product Data

POLYARMOR® 1010 PW is state of the art *polyurea* elastomer designed as a monolithic, seamless, waterproof liner for drinking water and where there is direct contact with food products. During final evaluation, POLYARMOR 1010 PW is for use with tanks of greater than 1000 gallon capacity and pipes of greater than 48 inch diameter.

POLYARMOR® 1010 PW is the first choice where a tough, unique, sprayed flexible liner is required. 525% elongation permits bridging moving cracks of up to 1/8th inch diameter. POLYARMOR 1010 PW is a very abrasion resistant coating, requires only extremely short down times, contains no VOC's and has extremely low odor.

The fast cure permits the coated area to be returned to service promptly. The fast cure allows the system to be applied in thicknesses of 10 mils up to 250 mils, or greater in one application.

- ◆ ANSI/NSF 61 Approved
- ◆ USDA Approved
- ◆ 100% solids, no VOC's
- ◆ Flexible, 525 % elongation
- ◆ Excellent thermal stability
- ◆ Shock resistant
- ◆ Abrasion resistant
- ◆ Low perm rate
- ◆ Cures -20°F to +350°F
- ◆ Return to service in 60 min.
- ◆ High strength
- ◆ Bridges moving gaps up to 1/8 inch wide
- ◆ Waterproofs
- ◆ Bonds to Concrete, Steel or Wood.

ANSI/NSF 61 APPROVED

Typical Uses

All applications where monolithic waterproof, potable water approved membrane is required.

- ◆ Potable Water Containment
- ◆ Tank Linings
- ◆ Waste Water Linings
- ◆ Food Product Containment Lining
- ◆ Railcar Lining for Food Products
- ◆ Pipe Line Coating

Typical Application Properties

POLYARMOR 1010 PW is a plural-component, fast cure, spray polyurea system. Equal volumes of parts "A" and "B" are proportioned and dispensed through high pressure, high temperature spray equipment. Consult Visuron Technologies for correct machine conditions.

- ◆ Gel time 12 sec.
- ◆ Tack-free time 60 sec.
- ◆ Open to water 60 min.
- ◆ Open to alternative exposure 4 hr.
- Bond Strength** (ASTM D-4541)
(primed substrate)
 - ◆ Concrete: 550 psi (concrete failure)
 - ◆ Steel: exceed 1600 psi
 - ◆ Wood: 200-250 psi (wood failure)

COLOR AVAILABILITY: light gray, dark gray, charcoal & beige



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Typical Physical Properties

Typical Physical Properties	Test Method	Value
Tensile Strength (psi)	D-638	3650
Elongation (%)	D-638	525
Tear Strength (pli)	D-624	920
Shore Hardness ("D" scale)	D-2240	50
Moisture Vapor Transmission	E-96	(perm. In.) 0.020
Abrasion Resistance (wt. Loss-mg.) H-18, 1000g, 1000 rev. CS-17, 1000g, 1000 rev.	D-6040 D-6040	112 < 6
Flash Point, components (°F)		>200
Coefficient of Thermal Expansion (in/in/°C)		approx. 4×10^{-5}
Gel Time / Tack Free		12 sec. / 60 sec.
Flame Spread	E-108	Class A (Comparable to UL 790)
Flexibility Test Gardner impact, in.-lbs. (on 1/32" steel panels) Direct and Indirect	D-2794	> 160
Mandrel Bend: Conical Bend (on 1/32" steel) 1/4 Mandrel, 25°C (free film, 35-50 mils) 1/4 Mandrel, -20°C (free film, 35-50 mils)	D-522 D-1737 D-1737	Pass Pass Pass

Installation/Surface Prep

Concrete — Do not apply in wet conditions. Concrete must be structurally sound, free of voids, honeycombs, bug holes and delaminations. Concrete must have at least a 3000 psi minimum compressive strength. An effective vapor barrier must be present for below grade and slab-on-grade projects. Do not apply over unvented steel pan decks or sandwich slab membranes. Maintain all expansion joints. Abrasive blast or tech to remove surface laitance. Emulsifying soaked in contaminants may be required. Consult Visuron Technologies. High degree of cleanliness is necessary. Surface must be dry and sound.

Substrate Repairs — All spalls and delaminations must be rehabilitated per ICRI and ACI standards. Rout and seal all cracks over 1/16" with appropriate joint sealants. Pre-fill all bug holes. All substrate repair materials must conform to ANSI/NSF 61.

Steel — Do not apply in wet conditions. Any dissolved salts must be removed to current NACE specifications. Steel must be cleaned and blasted to SSPC-SP-10 or NACE 2 "Near White Metal" with a 4 mil anchor profile for immersion service, 2 1/2 mil for less severe conditions. All welds must be ground smooth. Immersion service requires a primer. Consult Visuron Technologies.

General Surface Preparation — Mechanical methods such as shot blasting and sand-blasting are preferred. Any weak or damaged existing coatings must be removed. Sound existing coatings can possibly be overcoated with following: Abrade and application of Visuron Lap Prep. Verification trials are recommended.

Shelf Life & Storage

Six months in sealed unopened containers. Keep away from extreme heat, freezing and moisture. Never store in direct sunlight.

Clean up with Visuron CS-100 cleaning solvent, MEK, xylene or PGME. Dispose of in accordance with local and federal disposal regulations. See MSDS.

Read and understand the MSDS included with all shipments. Always use products with adequate ventilation and use required PPE. For confined space, use fresh air supply. For open air, use minimum of half-face, twin cartridge respirators approved for MDI. Always adhere to Society of Plastics Industry Safety Standards.